Aftermath

Vol. 7, Num. 2 The East Texas State University Mathematics Department Newsletter Fall 1992

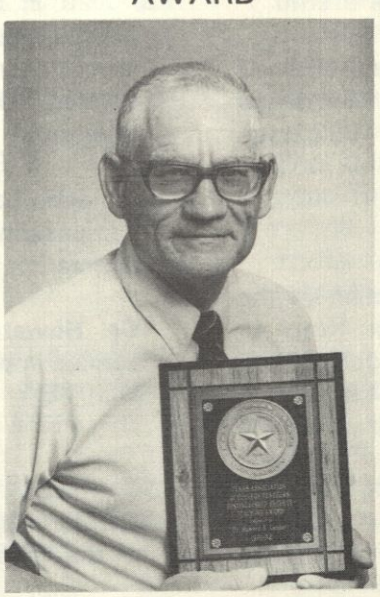
MATHEMATICS DEPARTMENT ADDS NEW FACULTY MEMBER

Let me introduce myself. I'm Rick Kreminski, from Hyattsville, Maryland. My apartment was about a mile from Washington, DC. That means I used to be one of those insiders who live "inside the Beltway". I have taught at The American University in Washington and at the University of Maryland in College Park. I have an MA in applied mathematics from the University of Maryland, and plan to defend my dissertation at the University of Maryland in October.

My research interests lie in applications of topology, geometry and algebra to particle physics and relativity. My dissertation work is in "supergeometry" (which is related to "supersymmetry" and "supergravity"). It should come as no surprise that the applications I'm interested in are to be probed at the Superconducting Supercollider.

I'm married to an environmental scientist, Anne, and have 2.0 kids (Chris, age 9.67, and Amelia, age 2.83).

HOWARD LAMBERT WINS 1992 T.A.C.T. AWARD



Howard Lambert received a Distinguished Faculty Teaching Award from the ETSU chapter of the Texas Association of College Teachers. He, along with two colleagues from other departments, was honored at the TACT's February 28, 1992 banquet. Faculty members were nominated for the award based on various criteria, including teaching style, theory and goals of college teaching, and rapport with students.

Several students, former students and colleagues gave written testimonials to Dr. Lambert's outstanding ability as an instructor. Among the many comments was the following: "In watching Dr Lambert deliver lectures, one is struck by his unfailing ability to render clear explanations on a great variety of topics. His descriptions of deep and majestic mathematical theorems are a wonder. They come out sounding as if a folksy storyteller were spellbinding an audience with a tale of his childhood." Many of those reading this newsletter recognize the description and applaud the honor accorded this deserving teacher.

SIXTH ANNUAL HOMECOMING ALUMNI BREAKFAST SCHEDULED

The 1992 Homecoming Alumni Breakfast will be held at 9:00 a.m., Saturday, October 24, 1992 in the Bluebonnet-Pecan-Friendship rooms in the Sam Rayburn Memorial Student Center. Scholarships will be awarded and alumni recognized. Please fill out the form on page 3 so we can update our alumni files and include marriages, births, job changes, job promotions and anything else you feel our alumni would like to know. The reservations for the breakfast must be received by October 19, 1992.

FACULTY ACTIVITIES

Publications

Dr. John Lamb, Jr. published an article entitled "A Mathematical Model of the Great Solar Eclipse of 1991" in the November, 1991 issue of School Science and Mathematics.

A paper entitled "Archimedes Versus Gauss: The Construction of a Regular Heptagon," by **John Lamb, Jr.** was published in a book by George Rassias entitled The Mathematical Heritage of C. F. Gauss - A Collection of Papers in Memory of C. F. Gauss.

Dr. John F. Lamb, Jr. and **Dr. Bill Aslan** published an article entitled "An Analysis of the Morris Loe Angle Trisection Method" in the April, 1992 issue of School Science and Mathematics.

Meetings Attended

The annual meeting of the Texas Section of the MAA in April, 1992 at the Sofitel Hotel in Houston was attended by **Stuart Anderson, Bill Aslan, Dale Bedgood, Dennis Grantham, John Heath, Charlie Jones, John Lamb, Jr., Howard Lambert** and **Vance Underhill**.

Dr. Stuart Anderson attended a Dynamical Systems Institute at Boston University in July, 1992.

Dr. **Archie Brock** attended the Conference of Texas Statisticians at Baylor University on February 28, 1992.

Dr. John Lamb, Jr. attended the annual meeting of the Conference For the Advancement of Mathematics Teaching in San Antonio in August, 1992.

Dr. Vance Underhill attended a workshop on MATLAB at West Valley College in Saratoga, CA in June, 1992.

Papers Presented

Dr. Stuart Anderson presented a paper at the annual meeting of the Texas Section of the MAA entitled "Undergraduate Dynamical Systems."

Dr. Bill Aslan presented two papers at the same meeting entitled "Mathematics Education Dilemma with a Solution" and "A Note on the Accuracy of the Rule of 72."

Dr. John Lamb, Jr. presented a paper at the same meeting entitled "A Computer Search for Narcissistic Numbers and Loops in Bases Other Than Ten."

Dr. Howard Lambert presented two papers at the same meeting entitled "Surprise: Improper Integral" and "A Glimpse of Fractional Calculus" (with **Annelle Fowler** MS 71, EDD 75).

Dr. Bill Aslan presented a paper at the ETSU annual Sigma Xi Symposium in November, 1991 entitled "The Science and Mathematics Teaching Dilemma."

Dr. John Lamb, Jr. presented a paper at the same symposium entitled "Report on Growing Second-generation Space Tomatoes."

Dr. Howard Lambert presented a paper at the same symposium entitled "Teaching Calculus with DERIVE."

Other Activities

Dr. John Lamb, Jr. was elected Level II Director of the Texas Section of the MAA.

Drs. Bill Aslan, Dale Bedgood and **John Lamb, Jr.** attended a computer workshop in Dallas on September 22, 1992 on Quatro Pro 4 for Windows.

MATHEMATICS WORKSHOPS FOR TEACHERS UPDATE

Teachers in the Northeast Texas area who participated in one of the two workshops taught by one of our mathematics education specialists, Dr. Bill Aslan, during the summer of 1992 experienced success in answering President Bush's call for team work to meet the challenge of America 2000. The emphasis on the discovery approach focused on problem solving, implementing new technologies, and teaching for understanding. These workshops presented content and methodology that enabled a participant to become a MASTER TEACHER.

SCHOLARSHIP COMMITTEE REPORT

The scholarship committee of the Mathematics Department selects several outstanding students to receive scholarships. These scholarships come from endowments named for the following people: Rachel Lafferty, Weldon "Bub" Taylor, Cecil B. Wright, and John and Elaine Yznaga. All of these scholarships are growing rapidly thanks to the generosity of our alumni. In the spring we will look for an outstanding high school mathematics student to offer to that student a four year scholarship.

MATH CLUB ACTIVITIES

The Mathematics Clubs had some very good leadership and accomplished a great deal during the 1991-92 school year. The officers were Connie Yarema, Pi Mu Epsilon President; Laura Lepro, Pi Mu Epsilon Vice-President; Rebecca Sutton, MAA President; Sherrie Cates, AGA President; Jean Jones, Treasurer of all three clubs.

Connie presented a paper at the meeting of the Texas Section of the MAA in Houston, and she and Laura attended a special Saturday morning meeting of Pi Mu Epsilon and MAA (student chapter) officers and were able to make some important contributions during this session. In early August, Connie traveled to Miami University in Oxford, Ohio, and presented her paper at the joint meeting of Pi Mu Epsilon and MAA Student Chapters.

One of our notable achievements was the organizing of a garage sale which enabled the clubs to donate $350 to the Bub Taylor Scholarship Fund. The officers for the 1992-93 school year are Sherrie Cates, Pi Mu Epsilon President; Kimberly McGahee, Pi Mu Epsilon Vice-President; Ron Williamson, MAA President; Jacky Allen, MAA V.P.; Kimberly Koch, AGA President; Connie Yarema, Treasurer for all clubs.

ALUMNI BREAKFAST RESERVATION FORM AND/OR ALUMNI NEWS UPDATE

Name:_____Position:_____

Address:_____

City, State & Zip:_____

Phone: (_____)_____

Please reserve _____ places at the Homecoming Alumni

Breakfast @ $6.00 each. Total Enclosed: $_____

Send news for the Alumni News Column on the back of this form:

BOOK REVIEW
by *Vance Underhill*

One of the more interesting attempts to bring an appreciation of mathematics to the average person has been through concentration on the human side of mathematicians. Perhaps the most successful book of this type is Mathematical People: Profiles and Interviews by Donald Albers and G. L. Alexanderson, published by Birkhauser in 1985. There are twenty-five profiles of living mathematicians (two or three have since died), and most, but not all, are of the interview format. Some of the mathematicians interviewed are Garrett Birkhoff, Paul Erdos, Paul Halmos, Morris Kline, Donald Knuth, Benoit Mandelbrot, George Polya, Raymond Smullyan, and Stanislaw Ulam. There are two non-mathematicians in the collection, Martin Gardner and Constance Reid. Reid, known for her books on Hilbert, Courant, and Neyman, is the sister of Julia Robinson, the only woman mathematician ever elected to the National Academy of Sciences.

This book was so successful that it was followed by a second volume in 1990, More Mathematical People: Contemporary Conversations, by Albers, Alexanderson, and Reid. There are eighteen interviews in this volume, including Ralph Boas, George Danzig, Saunders MacLane, Julia Robinson, Mary Ellen Rudin, and Robin Wilson (son of the former prime minister of England). Both books are fascinating to read, and the individual interviews are not connected, ideal for reading a few pages at a time.

DEPARTMENT HEAD'S COLUMN
by *Stuart Anderson*

Enrollment at ETSU is up once again this semester. While final figures are not available at this time, preliminary numbers show the Mathematics Department with an increase of over seventeen percent. The extra students come from a larger Freshman class, as well as a substantial number of mathematics majors who are continuing in our program. Our Junior and Senior level courses are extremely large - some having over 40 students.

We are pleased to see a sizable number of majors and feel that it reflects the fine work done by the teaching faculty in this department. Thanks should also go to the alumni who support our efforts through their calls, visits, and contributions.

The extra strain placed on the faculty by more students is being handled by several new members of the department. Dr. Richard Kreminski is a new assistant professor (see article on page 1). We have also hired two new adjunct instructors to help with beginning mathematics courses: Sandra Johnson and Bahareh Momken. Sandra has a B.S. and an M.S. from ETSU, while Bahareh comes to us with degrees from the University of Houston. Bryan Allen is also continuing to teach as an instructor.

The effects of the computer on mathematics education are still evident in our department. Several years ago, we were able to put a computer in each faculty member's office. A computer lab was also made available for our students in Binnion 327. We continue to update the hardware with new, more powerful machines as funding permits. Our software is also frequently updated. Presently, we have word processing packages, spreadsheets and computer algebra systems to enable our faculty to become more effective teachers and publishers.

Various instructors have made extensive use of the computer in teaching their courses. Business Mathematics, College Algebra, Calculus, Dynamical Systems and the new Space Exploration Capstone course have all tried various computer techniques in the classroom. While the ultimate direction of computer pedagogy is far from decided, we will continue to try to stay informed and practiced in this exciting new development.

FACULTY HEALTH REPORT

Dr. Dennis Grantham underwent surgery in May immediately following the close of the spring semester to remove a tumor and a portion of his intestinal tract. Since the surgery, he has gone through a series of treatments of radiation and chemotherapy. He is back in the classroom this semester teaching a full load.

Dr. Howard Lambert continues to be in a state of good health, adhering to a strict program of exercise and proper diet. Dr. Lambert suffered a severe heart attack while participating in a mathematics department softball game about five years ago.

Dr. Dale Bedgood has received excellent reports in follow-up tests since undergoing a series of 38 radiation treatments for prostate cancer in the fall of 1991. The cancer apparently was detected in the very early stages.

Perhaps the most exciting news around the mathematics department is that our secretary **Karen Starks**, is expecting a baby next April!

ALUMNI NOTES

John Griffith (B.S. 88)
3930 NW Witham Hill #22C
Corvallis, Oregon 97330

Anita Lyon King (B.S. 85) of Mansfield, Texas has a new baby girl. Leah Elaine King was born on August 12, 1992.

Laura Lepro (B.S. 87, M.S. 92) has taken a position teaching mathematics at Lake Highlands High School in Richardson.

James Epperson (B.S. 87) and **Stephanie Tyler** (B.S. 88), both doctoral students at the University of Texas at Austin, are working with the Emerging Scholars Program. The program is modeled after the successful work of Uri Treisman at the University of California at Berkeley.

MATHEMATICS SKILLS CENTER NEWS

The Math Skills Center moved from Binnion 325 to Binnion 327 & 328. The move was necessary to accommodate the increased demand for tutoring resulting from implementation of TASP (Texas Academic Skills Program). TASP was intended to force students who enroll in college with inadequate basic skills in reading, writing, and mathematics to address those deficiencies in the first two years of their academic careers. The number of students enrolled in developmental mathematics courses has, therefore, increased dramatically.

For the Fall '92 semester, our hours of operation have been extended - we open at 8:00 a.m., and we close at 7:00 p.m. on Monday through Thursday and at 4:00 p.m. on Friday. We now have four full time and one half time graduate assistant positions, as well as from six to eight undergraduate lab assistant positions each semester.

The computers in the MSC have been used to satisfy a wide variety of student needs. Many of our developmental students take advantage of the Algebra tutorial we make available to them for additional practice in "pre-quadratic" topics. Dr. Howard Lambert has been actively involved in the development of a Calculus Lab using the computer algebra system DERIVE for both Business Calculus and the regular Calculus classes. The students from the Dynamical Systems class taught by Dr. Stuart Anderson also used the computers extensively to explore many of the exciting topics which can only be addressed with the use of a computer.

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